(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 19 May 2005 (19.05.2005)

PCT

(10) International Publication Number WO 2005/044232 A1

(51) International Patent Classification7: A61K 9/107

(21) International Application Number:

PCT/US2004/035619

(22) International Filing Date: 27 October 2004 (27.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/514.709

27 October 2003 (27.10.2003) US

- (71) Applicant (for all designated States except US): DOW CORNING CORPORATION [US/US]; 2200 West Salzburg Road, Midland, MI 48686-0994 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): RAUL, Victor, A. [US/US]; 206E. Chapel Lane, Midland, MI 48640 (US). THOMAS, Xavier, Jean-Paul [FR/FR]; 7 bis, avenue de Lerida, F-09000 Foix (FR). SHIM, Anne, K. [US/US]; 5405 Drake Street, Midland, MI 48640-2410 (US). SCHA-LAU, Gerald, K., II [US/US]; 504 East Dawn Drive, Freeland, MI 48623 (US). CABALA, Janelle, L. [US/US]; 5632 Mangus Road, Beaverton, MI 48612 (US).

- (74) Agents: LAPRAIRIE, David, M. et al.; Howard & Howard Attorneys, PC, 39400 Woodward Avenue - Suite 101, Bloomfield Hills, MI 48304-5151 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A CONTROLLED-RELEASE COMPOSITION FOR TOPICAL APPLICATION AND A METHOD OF DELIVERING AN ACTIVE AGENT TO A SUBSTRATE

(57) Abstract: A controlled-release composition for topical application to a substrate includes an oil-in-water emulsion and an active agent incorporated into the oil-in-water emulsion. The oil-in-water emulsion is substantially free of lipophilic solvent and is formed by mechanical inversion of a water-in-oil emulsion. The water-in-oil emulsion includes a silicone component, a surfactant, and water. A method of delivering the active agent to the substrate provides the oil-in-water emulsion and incorporates the active agent into the oil-in-water emulsion for delivery of the active agent to the substrate upon application of the oil-in-water emulsion to the substrate.